



PRO LYFT

PAE-1000DC

www.prolyft.com



PRO
LYFT

Serial no. B1-P 10.001454 Mfg. Year 06.2014

No. of falls	1	2	FEM 1Am
WLL (D8)	1000kg	2000kg	
Lifting speed	4 m/min	2 m/min	

Chain EN 818-7 5x15,1 DAT

Power sply.	230V 3Ph/50Hz	400V 3Ph/50Hz	Isol.Kl. F
Power	0,66 kW	0,66 kW	Schutzart IP55
Speed	1400 1/min	1400 1/min	ED 50% S3
Current	2,9 A	1,7 A	S/h 300 1/h
cos φ	0,73	0,73	VDE 0530



Prolyte Sales BV
Industriepark 9 - 9351 PA Leek, The Netherlands



PRO LYFT



Contents

INTRODUCTION	206
AETOS CHAINHOISTS	208
CHAINHOIST ACCESSORIES	211
AETOS BASIC CONTROLLER	215
AETOS PRO CONTROLLER	216
THUJA NETWORK	218
AETOS +	219
AUXO	215
MANUAL CHAIN HOISTS	221
PROTRAC	223



Photo: Perinic Sistemi D.O.O, Voice of Croatia



ProLyft products

Lifting, drive and control solutions from ProLyft make productions happen, on stage, on tour, in theatres or sports arenas. They ensure safe object or performer movements and protect performers in their daily work. Whether up, down, left or right, the direction, speed or load of the movement is only limited by your imagination. ProLyft is able to cover a broad spectrum of lifting, drive and control solutions within the entertainment market due to employees with an open ear for customer demands and the ability to translate ideas into standard or customized solutions.

Get Ready for the Next Level

When Simplicity in Motion is the ultimate goal, there is always a next level to meet. ProLyft invites you to take that level further with a product range that is fit to meet the future.

Made for entertainment

ProLyft Aetos hoists are designed to meet the increasingly exacting demands of the entertainment market. These fool proof hoists are designed to withstand rigorous transportation and rough handling, and can be serviced just about anywhere – even if it is 12 metres above the stage!

ProLyft Aetos controllers for electric chain hoists are designed to meet the increasingly exacting demands of the entertainment market. The controllers are designed in accordance with the latest standards, using a user-friendly layout, reducing the risk of operator failures, in either simple or complex lifting situations.



Photo: ProLyft Service Point training at Prolyte Asia Pacific

The Unique ProLyft Program

ProLyft sustains a unique service programme on its complete hoist range, developed to offer maximum service and support for all hoist owners. This program encompasses:

- Installed network of trained and certified Service Points.
- Lifetime warranty.
- Individual identification - RFID tag on every hoist for easy, web-enabled, track and trace functions.
- ProLyft Service database – automatic reminders for re-certification.
- Test certificates worldwide online available for owners of every hoist.



Photo: © Prolyte Group

THE PROLYFT AETOS RANGE

The Aetos range is fully equipped to meet future demands in lifting equipment and offers clever features and carefully engineered product attributes. It comprises standard 250kg, 500kg and 1000kg hoists and controls.



EXTENDED LIFE, REDUCED MAINTENANCE

ProLift Aetos electrical chain hoists have been carefully engineered for the entertainment industry; specifically designed to endure daily use, extending the typical life expectancy of the hoist and chain.



Optimised Chain Feeding:

- Specially designed disentangle plate for optimal and jam-free chain feeding
- 90% reduction of locking chains.
- Jam-free steel chain guide.
- Disentangle plate insert softer than the chain.
- Chain bag bracket with integrated dead end of chain attachment.

EASY TO SERVICE:

- Easy replaceable disentangle plate insert.
- Easy access to chain guide and load wheel.
- Easy mounting of optional second brake.
- Easy replacement of electronic circuit board.
- Covers equipped with safety steel and captive bolts.
- All electronic components integrated on 1 circuit board.
- Adjustable clutch.

DESIGN:

- Damage reducing housing design.
- Hand grips integrated in covers.
- Replaceable smooth bumpers on covers.
- Through and through coloured plastic covers.



Limit switches on all hoists:

- Both "direct control" and "low voltage control" hoists are equipped with limit switches as standard.
- The limit switches are activated by a foam chain stop.
- Prevents hoists from being overloaded when running against the stop.
- Adding or positioning a foam chain stop to set a limit takes less than a minute.



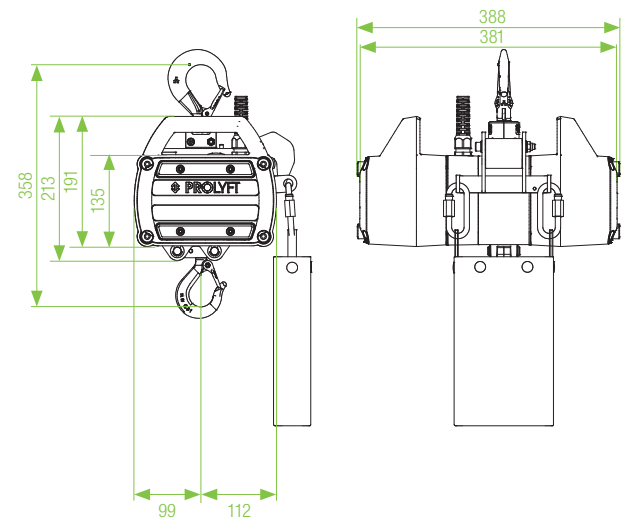
STANDARD FEATURES OF THE AETOS RANGE:

- Available in a 250kg, 500kg and a 1000kg hoist body.
- Fixed speed of 4m/min.
- Available in "direct control" and "low voltage control" versions.
- CEE form plug 16Amp 4pin and cable with strain relief for power connection.
- CEE form plug 10Amp 4pin and cable with strain relief for low voltage control (optional).
- Equipped with limit switches on all hoists, both direct control and low voltage control.
- End limit switches are activated by chain stop for 100% repeatable accuracy and easy of use.
- External limit switches can be used for hoists used above a grid or false ceiling.
- Multiple voltage motor, suitable for worldwide use.
- Chain bags for 30m up to 80m available.
- 5-pocket load wheel.
- Zinc-plated load chain.
- 100% sealed aluminium transmission house without oil plugs.
- Standard swivel hook on hoist body and hoist chain.
- IP 55 protection.

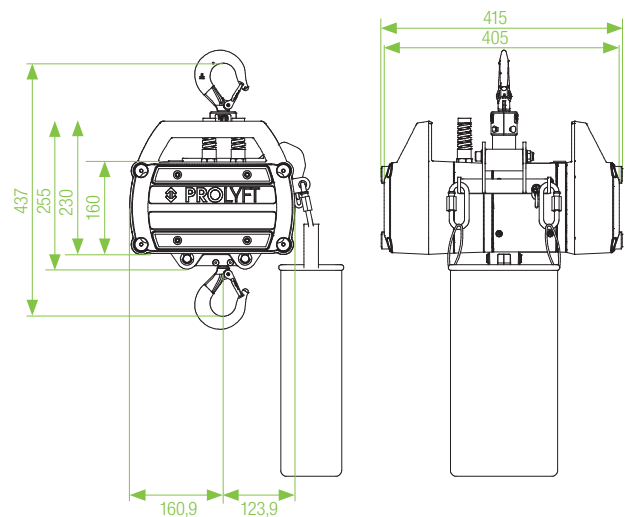
PREPARED FOR D8+, CATEGORY A AND BGV-C1 USE:

- The clutch overload protection device is mounted outside the drive train.
- Easy mounting of the second brake.
- Proper load capacity marking supplied with second brake.
- Limit switches available in direct control and low voltage control versions.
- Prepared for double end limit switches.
- Output shaft for rotary limit switch or encoder connection.

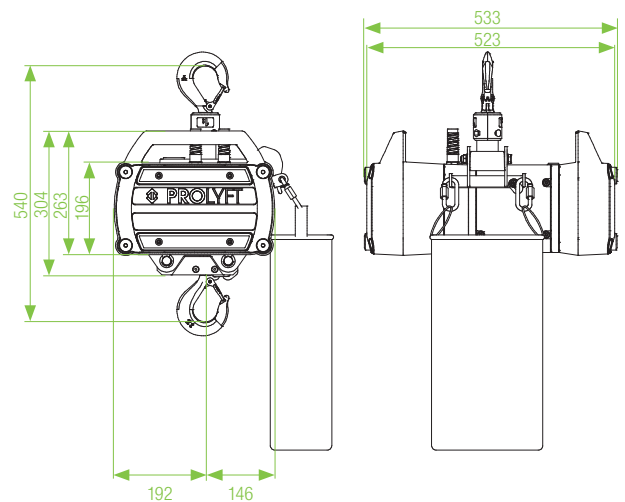
AETOS 250 KG HOIST



AETOS 500 KG HOIST



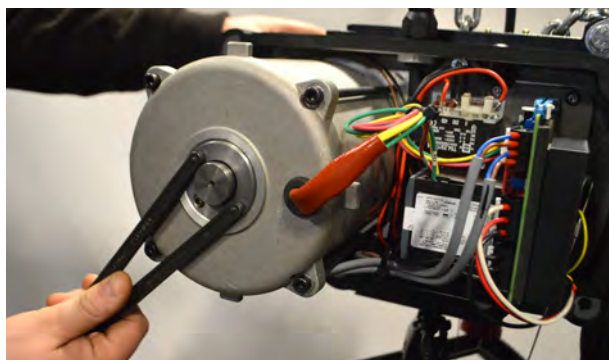
AETOS 1000 KG HOIST*



* Can be converted to a double reeved 2000kg hoist

AETOS CHAINHOISTS

Technical specifications				
Load capacity	250 kg	500 kg	1000 kg	2000 kg
Lifting speed	4m/min	4m/min	4m/min	2m/min
Operating voltage	230/400V - 50Hz	230/400V - 50Hz	230/400V - 50Hz	230/400V - 50Hz
	208/460V - 60Hz	208/460V - 60Hz	208/460V - 60Hz	208/460V - 60Hz
Protection Class	IP 55	IP 55	IP 55	IP 55
Motorpower at 50Hz	0,25 kW	0,33 kW	0,66 kW	0,66 kW
Current consumption at full load	0,75 Amp @ 400V	0,82 Amp @ 400V	1,46 Amp @ 400V	1,46 Amp @ 400V
	1,3 Amp @ 230V	1,42 Amp @ 230V	2,53 Amp @ 230V	2,53 Amp @ 230V
FEM Class	1Am	1Am	1Am	1Am
FEM Duty factor	50%	50%	50%	50%
Starts per hour	300	300	300	300
Noise Level	60 dBA	60 dBA	60 dBA	60 dBA
Load Wheel	5 pocket	5 pocket	5 pocket	5 pocket
Load Chain EN 818-7	4,0 x 12,2mm	5,0 x 15,1mm	7,1 x 20,5 mm	7,1 x 20,5 mm
Falls of chain	1	1	1	2
Weight of Chain	0,35 kg	0,53 kg	1,1 kg	1,1 kg
Weight of Body	18 kg	28 kg	47 kg	47 kg
Type of Control	DC and LVC	DC and LVC	DC and LVC	DC and LVC
Limit switches	single up/low limitswitches on DC and LVC	single up/low limitswitches on DC and LVC	single up/low limitswitches on DC and LVC	single up/low limitswitches on DC and LVC
Type of Power Connector	CEE 16A-4p (red)	CEE 16A-4p (red)	CEE 16A-4p (red)	CEE 16A-4p (red)
Type of LVC Connector	CEE 10A-4p (yellow)	CEE 10A-4p (yellow)	CEE 10A-4p (yellow)	CEE 10A-4p (yellow)
Low Voltage Control Voltage	24V	24V	24V	24V



Easily Adaptable:

- Covers 180 degree rotatable for motor-up use.
- Easy mounting of optional second brake.
- Brake shaft and electronics prepared for second brake.
- Output shaft prepared for rotary limit switch or encoder connection.
- All hoists can be double reeved.
- Swivelling chain bag bracket for motor-down and motor-up use.
- Multiple voltage motor.





Photo: PROMontaje,

AETOS ACCESSORIES RANGE

A complementary range of accesories, to adapt your hoists to all types of use. Sturdy chainbags, with a perfect fit and reinforced bottom, to keep the chain secured in the bag, from 22 to 80m chain lenght.

Swivelling chain bag brackets for motor-down or motor-up use. For all hoists types. High grade zinc plated chain to complement your hoists. Available in several lengths and loading types.



PLA-10-004

Chainbag max 22mtr, 4.0x12.2mm chain



PLA-10-013

Chainbag max 30mtr, 5.0x15.1mm chain



PLA-10-009

Chainbag max 65mtr, 7.1x20.5mm chain



PAE-S-BR250

BRACKET CHAINBAG ASSY AETOS 250



PAE-S-BR500

BRACKET CHAINBAG ASSY AETOS 500



PAE-S-BR1000

BRACKET CHAINBAG ASSY AETOS 1000

AETOS ACCESSORIES



PLS-10-002

Chain 4X12,2mm/m (250Kg hoists)



PLS-12-002

Chain 5,0x15,1mm/m (500Kg hoists)



PLS-11-002

Chain 7,1x20,5mm/m (1000Kg hoists)



PLA-10-006

QUIK LINK 4MM,ELV.FOR CHAINBAG.

Quick connection link to connect the chainbag safely to the chainbag bracket.



PLA-10-008

QUIK LINK 6MM,ELV.FOR CHAINBAG.

Quick connection link to connect the chainbag safely to the chainbag bracket.



PLA-31-05

Control Cable Low Voltage Hoists

6A, CEE 4p. To be used for low voltage controlled hoists. Available in several lengths.



PLA-32-05

Powercable 32A/400V/5p

Mains cable 32A, CEE 5p. To be used to connect your controls to the power system. Available in several lengths.



PLA-33-05

Multi cable, 16p. HARTING

To be used to connect up to 4 hoists - in combination with the 4-way break-out or break-in. Available in several lengths.



PLA-34-01

Break-in Cee-form to Harting, Direct Control

Adapter to connect a multi cable to 4 motor cables . 4 x 4p. Male CEE connector to female HARTING connector.



PLA-34-02

Break-out Harting to Cee-form, Direct Control

Adapter to connect 4 motor cables to a multi cable. Male HARTING connector to 4 x 4p. female CEE connector.



PLA-34-04

Break-out Harting to Cee-form, Low Voltage Control

Adapter to connect 4 motor cables to a multi cable. Male HARTING connector to 4 x 4p. female CEE connector. For low voltage hoists.



PLA-35-05

Powercable 16A/400V/3p

Motor cable 16A, CEE 3p. To be used for direct controlled single phase hoists. Available in several lengths.



PLA-36-05

Powercable 16A/400V/5p

Mains cable 16A, CEE 5p. To be used to connect your controls to the power system. Available in several lengths.



AETOS AS THE STARTING POINT

Aetos hoists and controllers make it possible to create the best and most affordable solution for every lifting situation. Standard Aetos hoists and controllers are fit to cover your average lifting situation, they are designed with an understanding of the requirements of entertainment rigging, making them easy and intuitive to operate.

The system offers power and control connections which are commonly used within the entertainment sector worldwide and are easy to adapt to special power requirements.

The control system offers added safety through a clear overview of selected hoists during operation, while an optional remote control guarantees an overview of the lifting situation from the best possible viewpoint.

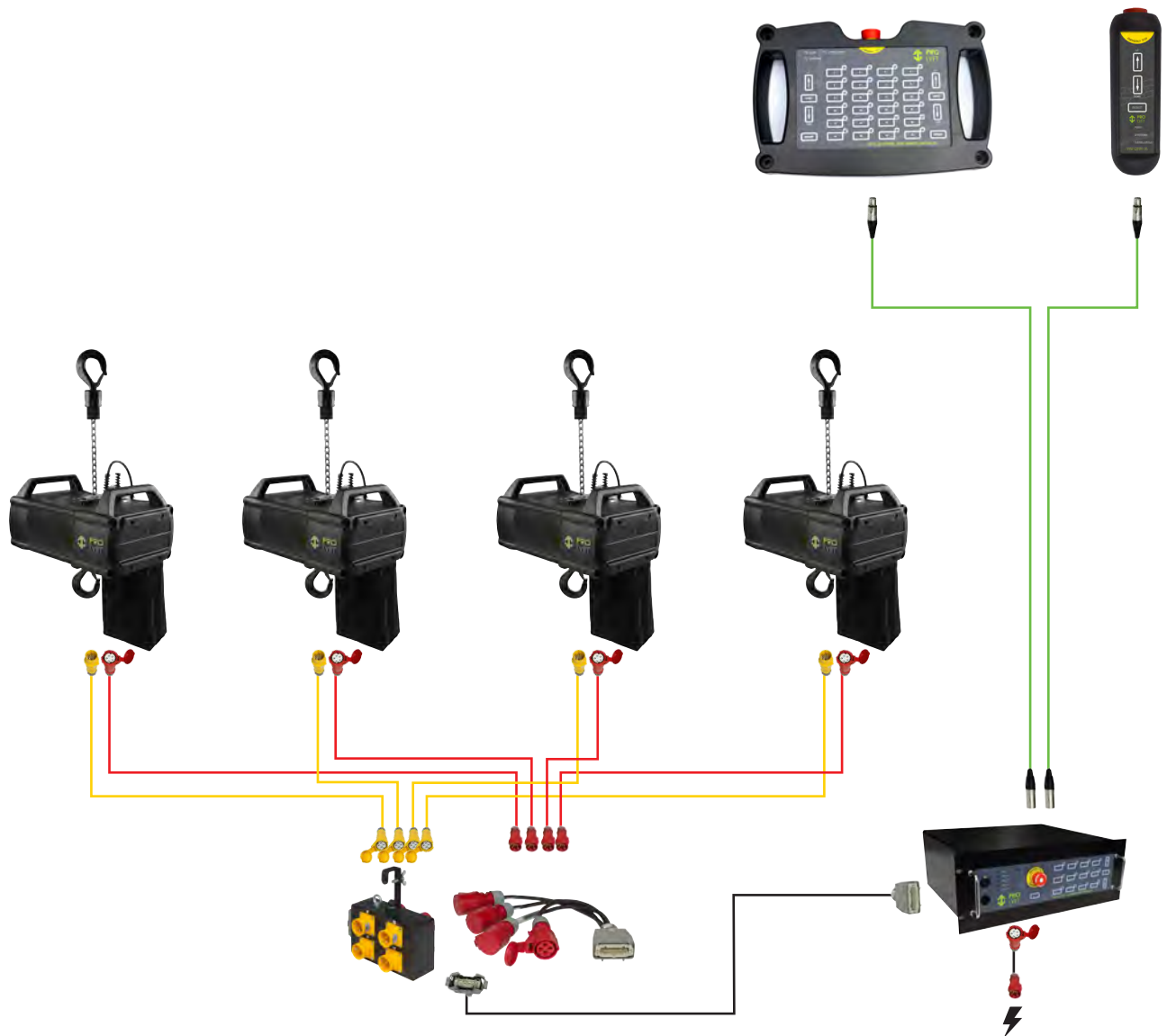
REMOTE CONTROL

All Aetos remote controls have an ergonomic design to make them easy to handle and operate.

The Aetos 1-channel remote control can be used as a remote up/down in combination with the Aetos Pro controllers, or as a pickle on a single Auxo hoist.

The Aetos 24-channel remote control brings all of the functionality of the Pro controllers to the remote control, including possibilities for both left and right hand operation.

All remote controls connect to the hoists or controllers using the Thuja Network connection (7p XLR), indicators on the front panel show errors, selections and availability.



Low voltage setup

AETOS ACCESSORIES



PLA-40-001

Flightcase 250kg hoist



PAE-A-FC500

Flightcase 500kg hoist



PAE-A-FC1000

Flightcase 1000kg hoist



PLA-50-003

Raincover 1000kg hoist single reeved



PLA-50-007

Raincover 1000kg hoist double reeved



Photo: © Prolyte Group

PROLYFT AETOS CONTROLLERS

ProLift Aetos controllers have been engineered with an understanding of the needs of rigging operators. The front panel layout and the functionality of the buttons have been carefully designed to meet

the demands of daily practice in lifting, where any selection mistake can create an overload situation.

AETOS BASIC CONTROLLERS

Aetos Basic controllers are designed for applications that do not require advanced technology, offering a safe, simple, robust and effective control solution.

Available models

- 4- and 8-channel version.
- Direct Control and Low Voltage Control version.
- 400V and 230V version.

Specifications

- Robust rotating up/down selection switches per channel.
- Main circuit breaker per 4-channels.
- LED phase indication.
- E-stop at SIL2 level.
- Illuminated start button.
- 32Amp/400V CEE form 5pin mains connector.
- Mains connector with phase inversion insert.
- Harting 16pin output connector(s).
- 19-inch rack mountable housing.
- No link function.

Article codes:

PAE-C4DC-00	CH CONTROLLER AE 4 WAY BASIC 400-3 DC
PAE-C4LV-00	CH CONTROLLER AE 4 WAY BASIC 400-3 LV
PAE-C8DC-00	CH CONTROLLER AE 8 WAY BASIC 400-3 DC
PAE-C8LV-00	CH CONTROLLER AE 8 WAY BASIC 400-3 LV
PAE-C4DC-01	CH CONTROLLER AE 4 WAY BASIC 230-3 DC
PAE-C4LV-01	CH CONTROLLER AE 4 WAY BASIC 230-3 LV
PAE-C8DC-01	CH CONTROLLER AE 8 WAY BASIC 230-3 DC
PAE-C8LV-01	CH CONTROLLER AE 8 WAY BASIC 230-3 LV





Photo: Promontaje

THE AETOS PRO CONTROLLER RANGE

The Aetos Pro controllers are designed for:

- Professional rental companies, demanding a flexible control system to facilitate the frequent change of lifting configurations, offering both easy operation and a clear overview of the selected and operated hoists.
- Permanent installations, where controllers are centralised and operated remotely; and where there is a growing demand for multiple remotes and E-stops.
- Use with touch screen remotes, enabling you to create groups of hoists or patch your hoists to any control position.



SPECIFICATIONS

Front panel:

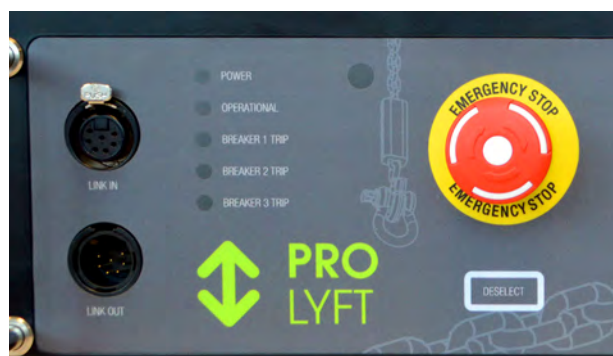
- Sealed front panel with integrated buttons.
- Hoist selection switches to select the group of hoists to operate.
- Group up/down switch.
- Bump function within a selected group.
- Single deselect button for easy clearing of the previous selection.
- Emergency stop at SIL2 level.

Back panel and housing:

- 32Amp/400V CEE form 5pin mains connector with 1,5m powercord.
- Automatic phase order detection.
- Main breaker on back panel, per 4-channels.
- Modular power packs per 4 channels, easily interchangeable.
- Harting 16pin output connector(s).
- 9-inch rack mountable housing.

AVAILABLE MODELS:

- 4-, 8- and 12-channel version.
- Direct Control and Low Voltage Control version.
- 400Volt and 230Volt version.



With special LED indicators:

- LED indicators for "power", "breaker trip" and "operational".
- LED indicators to show the selection per switch.
- LED output automatically adjusts to light conditions:
 - Bright in the sun.
 - Soft in the darkness of a stage.



PAE-C4DC-10	CH CONTROLLER AE 4 WAY 7P-BUS 400-3 DC
PAE-C4LV-10	CH CONTROLLER AE 4 WAY 7P-BUS 400-3 LV
PAE-C8DC-10	CH CONTROLLER AE 8 WAY 7P-BUS 400-3 DC
PAE-C8LV-10	CH CONTROLLER AE 8 WAY 7P-BUS 400-3 LV
PAE-C12DC-10	CH CONTROLLER AE 12 WAY 7P-BUS 400-3 DC
PAE-C12LV-10	CH CONTROLLER AE 12 WAY 7P-BUS 400-3 LV
PAE-C4DC-11	CH CONTROLLER AE 4 WAY 7P-BUS 230-3 DC*
* Other 230V options follow the same article coding as the 400V	



REMOTE CONTROL:

The unique Aetos remote control has 24 channels. Its ergonomic design makes it easy to handle and operate. The up and down buttons are situated on both the left and right sides of the panel to facilitate both left and right handed operation. The remote control connects to the controller using the Thuja network connection (7pin XLR). Indicators on the front panel show errors, selections and availability.

PAE-C24R-10	CH REMOTE AE 24 CHANNEL 7P-BUS
-------------	--------------------------------



PAE-A-FC19IN4U

Controller flightcase 19-inch 4HE



Photo: © Prolyte Group

INTRODUCING THE PROLYFT THUJA NETWORK SYSTEM

In conjunction with the Aetos range of electric chain hoist controllers, ProLyft introduces the Thuja network. Thuja is a digital data network for controlling lifting equipment in the entertainment industry; safe enough for lifting above people, simple enough for touring use.

The Thuja network will enable far-reaching possibilities for future control solutions.

The Thuja network allows links between Aetos controllers, creating an extended system, offering the ability to connect remote controls, read feedback from hoists and connect extra E-stops.

To prevent interference with other data networks used in the industry, and to minimize the risk of unsafe network communication, the Thuja network uses standard cat5 cables with 7-pin XLR connectors.



PTH-7PXL-0.3

THUJA NETWORK CABLE 7P-XLR 0,3M

Thuja network cable to connect lifting control equipment.

AETOS PRO CONTROLLERS

- Thuja network connection "Link in" / "Link out" by 7pin XLR's on front panel to:
 - Link controllers (up to 99).
 - Connect remotes.
- The order of linking will automatically number the controllers on the remote.
- Emergency stop in a linked configuration at SIL2 level.



STEP UP TO A NEXT LEVEL

The ProLift Aetos+ range is an extension to your standard Aetos products with helpful accessories for load measuring and positioning. Creating the possibility to safely suspend loads above people, protect your lift against overloading and to provide more essential information to the operator, thereby adding safety in your lifting application.

Load cells, geared limit switches and encoders work as simple add-ons to the existing systems. These add-ons are wired to a separate smart control interface, making the system very cost-efficient and easy to up- or downscale for each lifting application.

GROUP PROTECTION

Connecting the control interface in a position between the remote control and the hoist controller, each add-on is automatically connected to the corresponding hoist, thereby also creating group protection. Crossing any limit of one of the selected hoists will stop the complete selected group.

AETOS SYSTEM INTEGRATION

Aetos+ accessories fully integrate with all Aetos hoists and Pro controllers:

- Independent from the type of control, direct or low voltage control
- Independent from the load capacity
- Independent from the amount of controlled channels

Due to these options the system offers ultimate flexibility, parts of the installation can be upgraded without losing control over the non-upgraded part.

LOAD MONITORING

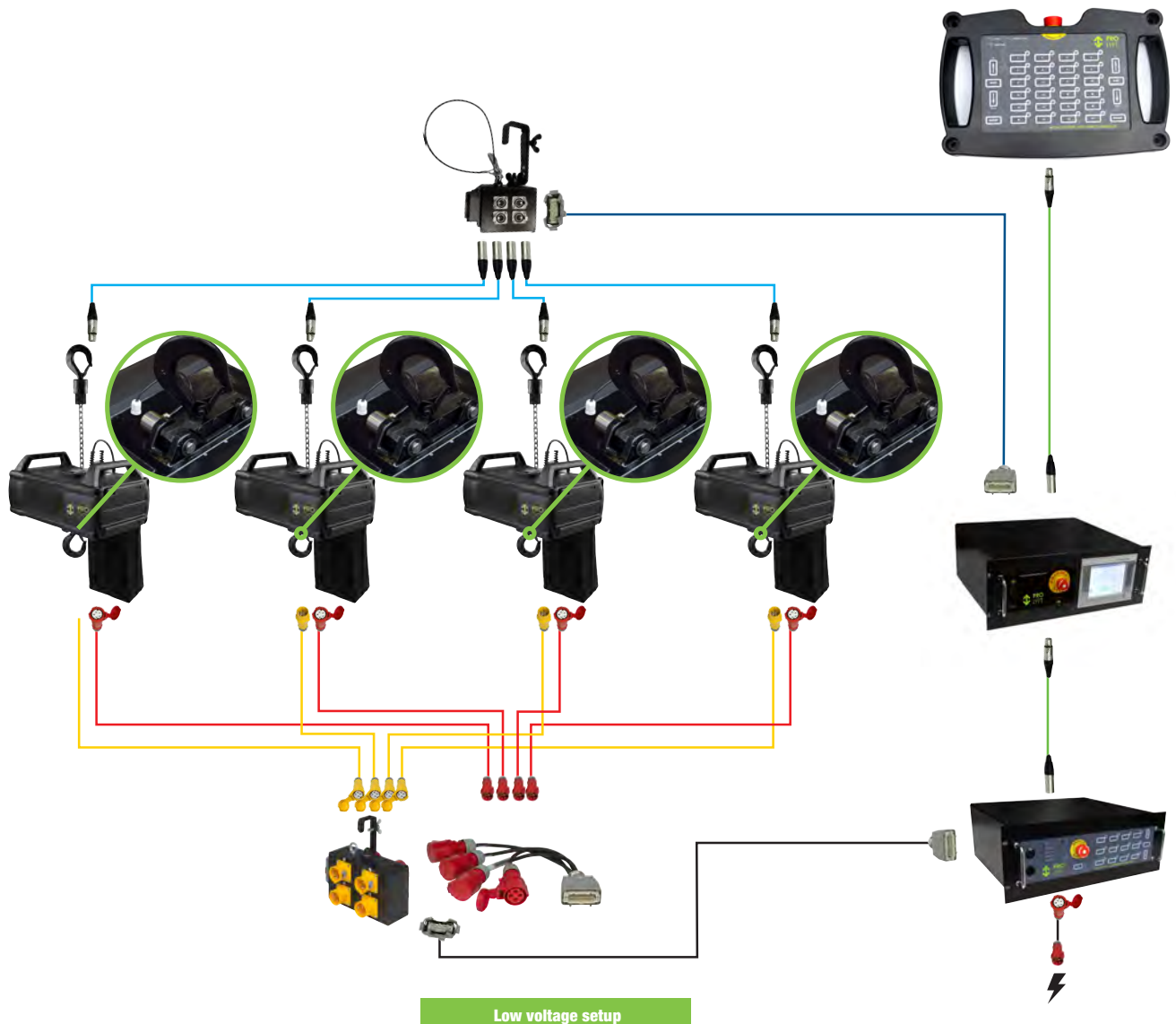
The load monitoring interface is positioned in between the remote control panel and the hoist controller. The load monitor reads the load cells and connects the load data to the corresponding hoist.

Additional functions of the load monitoring interface are:

- Hoist and chain length selection to detect self weight of hoists
- Motor up or motor down selection
- Overload level switch-off setting
- Overload level warning setting
- Peak hold display

Hoists can always be lowered when an overload is detected.

The connection of the hoist to the hoist controller remains unchanged and is identical to the Aetos range, for either Direct Control or Low Voltage Control.



AUXO, MADE FOR ENTERTAINMENT

The ProLift Auxo range provides out-of-the-box solutions for simple to complex situations, answering the daily needs for safe rigging. The Auxo system is based on the Aetos hoist bodies, but offers a total new approach to lifting and control solutions, stepping away from control systems as we know and opening a world of new possibilities.

THUJA NETWORK

Thuja is a digital data network for controlling lifting equipment in the entertainment industry; safe enough for lifting above persons, simple enough for touring applications.

All hoists are connected via the Thuja network using a cat5 cable with 7-pin XLR data connection. You can daisy chain from one hoist to another. Like this all hoist are connected with an individual address, either by self addressing or by patching, based on the unique hoist numbers.

OPERATING THE AUXO

The Auxo hoist can be operated with:

- A stand alone 1-channel remote control
- A 24-channel remote control in a group of maximum 24 hoists
- A touch screen controller in a set of maximum 999 hoists

INTEGRATED COMPONENTS

All Auxo hoists are standard equipped with:

- Load read-out
- Hook position read-out
- Phase order detection, up is always up
- Overload log and overload protection
- Motor up / motor down detection
- Registration of running hours and loaded hours
- Maintenance advice based on running/loading hours

POWER AND EMERGENCY STOP

Each hoist has its own emergency stop relay, power for the hoist may be taken from any power outlet available. In this set up you can:

- Combine power for the hoists with power for the lighting department
- Take power from the nearest wall outlet
- Daisy chain power from one hoist to another



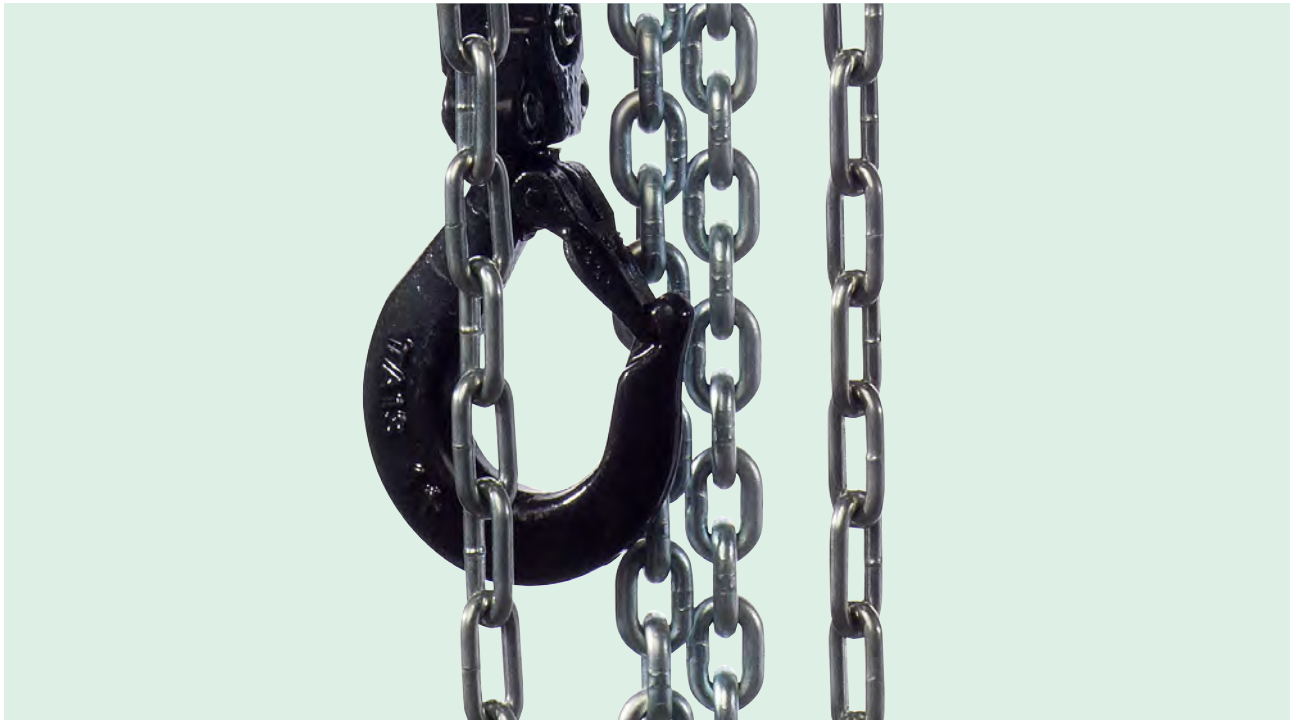


Photo: © Prolyte Group

PRODUCT FEATURES: PHC-500ST AND PHC-1000ST

- Available in 500 and 1000 kg load capacity versions.
- Standard lifting chain lengths: 10, 15, 20, 25m.
(The hand chain is always two times the length of the load chain).
- Hand chain guide prevents toppling or jamming of the hand chain.
- High quality bearings to ensure smooth operation.
- Robust, black powder coated housing.
- Zinc plated and/or yellow chromated brake parts and guide rollers.

- Zinc plated load chain and hand chain.
- Rotating hooks on housing and chain.

CHAIN BAG

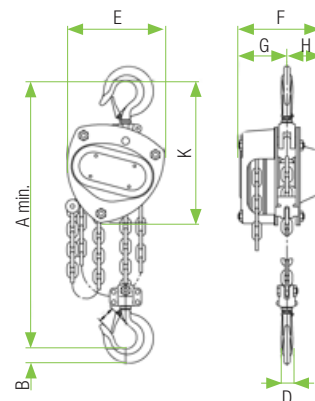
The manual chain hoist can be equipped with standard chain bags fitting the chain or oversized chain bags that can also be used to transport the manual hoist.



PHC-500ST

PHC-1000ST-1010

Manual Chain Hoists 500kg and 1000kg



	A	B	D	E	F	G	H	K
PHC-500ST	350	21	16	145	140	80	60	240
PHC-1000ST	380	28	20	158	155	87	68	270

	load capacity	Chain size	lift per 1m hand chain overhaul	pull on hand chain at WLL	Weight
PHC-500ST-1010	500kg	5x15mm	26mm	210N	20kg
PHC-500ST-1515	500kg	5x15mm	26mm	210N	27kg
PHC-500ST-2020	500kg	5x15mm	26mm	210N	35kg
PHC-500ST-2525	500kg	5x15mm	26mm	210N	43kg
PHC-1000ST-1010	1000kg	6x18mm	24mm	240N	27kg
PHC-1000ST-1515	1000kg	6x18mm	24mm	240N	37kg
PHC-1000ST-2020	1000kg	6x18mm	24mm	240N	47kg
PHC-1000ST-2525	1000kg	6x18mm	24mm	240N	57kg

MANUAL CHAIN HOISTS

QUALITY IN 2 VERSIONS

The manual chain hoists are available in a standard version and in a version with a rotatable hand chain guide. Both versions offer a 1000kg and a 500kg SWL capacity. These premium quality, basic hoists offer different chain lengths on both versions, optional black powder coating and a high quality zinc plated chain.

OPERATES FROM ANY POSITION

Using the rotatable hand chain guide the operator can work from any position, being able to follow and operate from any work position. This allows the operator to stand and work outside the danger zone near the load. The rotatable hand chain guide makes this hoist type specifically suited for tower and roof system applications, where the hoist is used in an inverted position.

PRODUCT FEATURES: PHC-500RHG AND PHC-1000RHG SERIES

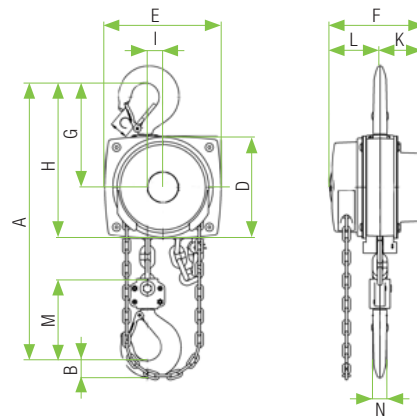
- Available in 500 and 1000 kg load capacity versions.
- 360 degree rotating hand chain guide.
- High quality and easy serviceable brake system.
- Zinc plated and/or yellow chromated brake parts and guide rollers.
- Zinc plated load chain and hand chain.
- Chain guide and gearbox almost completely closed for maximum protection.
- Rotating hooks on house and chain.
- Available chain length: The RHG series hand chain hoist can be supplied with any preferred amount of load and hand chain. Used in combination with most of the MPT towers the hoist will be configured with 15m load chain and 3m hand chain (PHC-500RHG-0315).



PHC-500RHG-0315

PHC-1000RHG-0315

Manual Chain Hoists 500kg and 1000kg rotating hand chain guide



	A	B	D	E	F	G	H	I	K	L	M	N
PHC-500RHG	300	17	133	148	148	139	206	24	61	87	110	14
PHC-1000RHG	335	22	156	175	167	164	242	24	70	97	125	19

	load capacity	Chain size	lift per 1m hand chain overhaul	pull on hand chain at WLL	Weight
PHC-500RHG-0315	500kg	5x15mm	33mm	210N	15kg
PHC-1000RHG-0315	1000kg	6x18mm	20mm	300N	25kg

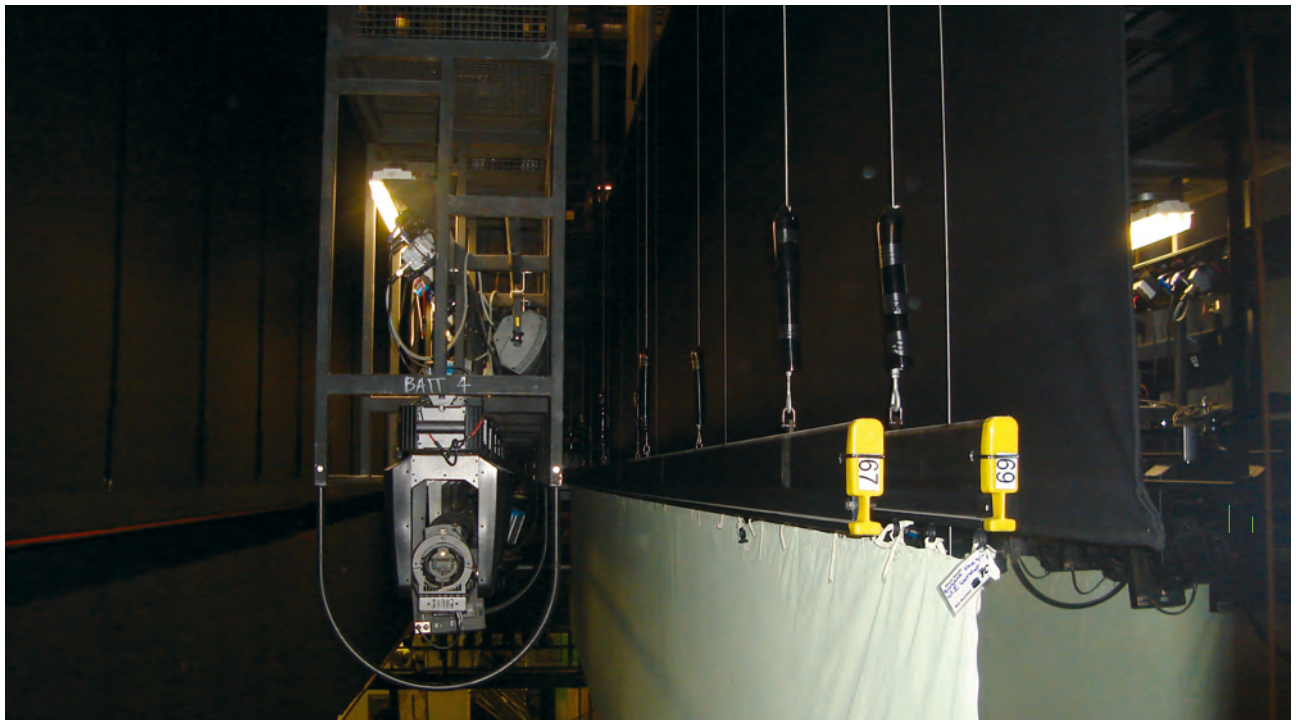


Photo: Royal Opera House, London, UK

READY FOR THE FUTURE

The rapid evolution of contemporary theater productions has placed new demands on existing fly-bar systems. Important recent developments include higher loading requirements, a growth in the scope of productions, and the introduction of mechanically operated fly-bar systems. The demands placed by new production techniques have made many fly-bar systems no longer suitable for the job.

Developed to fill this gap, ProTrac* is a substantially upgraded fly-bar system with several extra options and a high loading capacity. Additionally, because ProTrac is a lightweight system (low inherent weight), it allows a higher net loading capacity for your winches or drives.

ACCIDENTS AVOIDED

Compared to commonly used conventional fly-bars or steel ladder beams, ProTrac dramatically reduces the horizontal bending that results from applying loads to the fly-bar.

ProTrac has practically NO lateral flex: horizontal bending is less than 2 cm over 24 m of length when full load is applied. Nearby fly-bars will not be blocked and, more importantly, potential accidents due to the blocking of the flyway can be prevented.

Further, ProTrac can be furnished with yellow end-caps to enhance visibility of the fly-bar, thus providing an extra safety margin for technicians and actors when working on stage.

EASY INSTALLATION

The ProTrac system is very flexible, allowing components of several different lengths to be easily combined and connected.

ProTrac can replace conventional fly-bars in theatres or other venues without any alteration of the existing installation. There is no need to make adjustments to the suspension cables or the complete fly-bar system: the steel wires of the existing system can simply be connected to the adjustable suspension points of the ProTrac components.

Calculation methods used for ProTrac comply with DIN 56921.

SYSTEM DESCRIPTION

ProTrac consists of a rectangular upper profile of extruded aluminium combined with a lower round aluminium tube or profile. Three types of lower profile can be connected to the upper profile:

- 1 Tube with slot profile 48,3 mm
- 2 Tube with slot profile 48,3 mm, with integrated rail fitting for Helm 100 runner
- 3 Tube with slot profile 60 mm, with integrated rail fitting for Helm 100 runner

The lower profile connects to the upper profile with stud bolts.

Suspension points for the ProTrac components slide into the slot of the upper profile and are easily fixed, due to a lock and load system. ProTrac is a modular system.

ProTrac is a modular system. Variable lengths can be connected via internal tubes, which are bolted into place. The connection of two lower profiles is placed under 45 degrees to guarantee flawless runner travel. ProTrac's profiles are black anodised and are furnished with rubber caps at the ends. The upper profile can be fitted with extra drilled holes of 50 mm (spaced 500 mm) to provide fittings for integrated electrical sockets.

ADVANTAGES

- High loading capacity. Max. Point load of 350 kg on 4,5 m span possible
- High Safety Factor: ProTrac has a Safety factor of 5 (on permanent deformation) and 10 (on failure)
- Reduced horizontal bending. The lateral flex is less than 2 cm over 24 m length if full load is applied, nearby fly-bars will not be blocked
- Very low inherent weight: ProTrac is 20 to 25% lighter than steel ladder beams, which offers extra load capacity for your scenery
- Modular and flexible: ProTrac can be used in all theatres or other venues, without any adjustments or changes to the structural components
- Compact build height: ProTrac has a build height of only 306 mm
- Black stays black: ProTrac is anodised black
- Enhanced safety; End-caps available in several colours

*ProTrac is a patented system

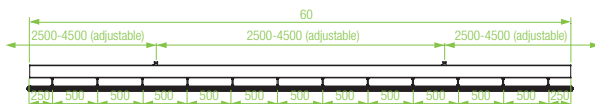
DO

- Only use pre-tensioned steel wires for the suspension of fly-bars
- Check the actual load on the fly-bar before the first movement
- Check the suspension of the load to the fly-bar before the first movement
- Make sure the fly path of loads or set pieces is not blocked
- Make sure you use the right type of sheave for your steel wires
- Only use tested and certified hardware
- Keep a written logbook

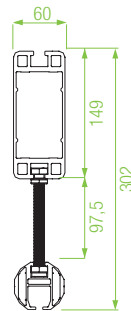
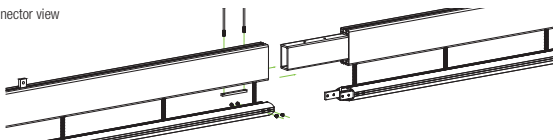
DO NOT

- Exceed the maximum allowable load given
- Cantilever the ProTrac more as stated in the structural report
- Use damaged parts or suspension equipment

Front view



Connector view



- The given allowable loading is for the complete ProTrac system, and is equal for 48,3 mm or 60 mm lower tube.
- The allowable loading is given for the ProTrac only. In a complete system winch capacity and total length also have to be taken in account.
- The total weight of 2 point loads in 2 adjacent fields should not exceed the maximum allowable capacity of the suspension cable points.

TECHNICAL SPECIFICATIONS PROTRAC

TYPES	UPPER PROFILE	LOWER PROFILE 48,3 mm ¹	LOWER PROFILE 48,3 mm + HELM 100 ²	LOWER PROFILE 60 mm + HELM 100 ³
Alloy	EN AW 6082 T6 F28	EN AW 6082 T6 F31	EN AW 6005 F26	EN AW 6005 F26
Profiles	60 diam.	48,3 diam.	48,3 diam.	60 diam.
Coupling system	bolts	bolts	bolts	bolts
Self weight	6,088 kg/m	1,944 kg/m	1,921 kg/m	2,534 kg/m
Ix in mm ⁴	6581770	133896	116630	222400
Wx in mm ³	90437	5760	4160	7963
Iy in mm ⁴	1074310	145635	160570	289000
Wy in mm ³	36575	6350	6648	9999

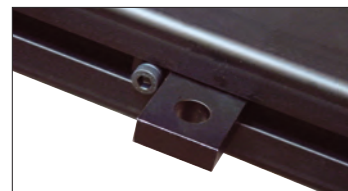


Fig 1. Slide in lock and load block in upper profile.



Fig 2. Connection of upper to lower profile by means of stud bolts which are fastened with a self locking nut.



Fig 3. The 60 mm lower profile with integrated rail profile fit for Helm 100 runners for 48H & 60H.

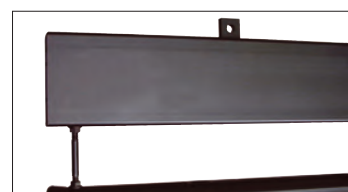


Fig 4. A completely assembled section of ProTrac.

MAXIMUM DYNAMIC LOADS

SPAN		DISTRIBUTED Load		MAXIMUM ALLOWABLE POINT LOADS							
				1		2		3		4	
m	ft	kg/m	lbs/ft	kg	lbs	kg	lbs	kg	lbs	kg	lbs
2,5	8,2	462,3	311,1	577,9	1275,4	433,4	956,6	288,9	637,7	239,8	529,3
2,7	8,9	396,1	266,5	534,7	1180,0	401,0	885,0	267,3	590,0	221,9	489,7
2,9	9,5	343,0	230,8	497,4	1097,7	373,0	823,3	248,7	548,9	206,4	455,6
3,1	10,2	299,9	201,8	464,9	1026,0	348,7	769,5	232,4	513,0	192,9	425,8
3,3	10,8	264,4	177,9	436,3	962,9	327,2	722,2	218,1	481,4	181,1	399,6
3,5	11,5	234,8	158,0	410,9	907,0	308,2	680,2	205,5	453,5	170,5	376,4
3,7	12,1	209,9	141,2	388,3	857,0	291,2	642,8	194,2	428,5	161,2	355,7
3,9	12,8	188,7	127,0	368,0	812,1	276,0	609,1	184,0	406,1	152,7	337,0
4,1	13,4	170,5	114,8	349,6	771,6	262,2	578,7	174,8	385,8	145,1	320,2
4,3	14,1	154,9	104,2	332,9	734,8	249,7	551,1	166,5	367,4	138,2	304,9
4,5	14,8	141,2	95,0	317,7	701,2	238,3	525,9	158,9	350,6	131,9	291,0





Photo: TSD Group,



PROLYTE CAMPUS

Prolyte Campus

Prolyte Campus is a Prolyte Group initiative to support its customers with the best and most up-to-date knowledge available. Providing the tools and training to use the Prolyte Group products safely and in compliance with applicable standards and regulations will help you perform better. Prolyte Campus offers a complete program of learning activities to create awareness on the safe use of Prolyte products.

Providing the knowledge to let your business grow

As a manufacturer Prolyte Group always feels the responsibility to supply knowledge as integrated part of its products.

Creating the awareness that safe working practices are key to responsible ownership is one of our goals. Placing all our training initiatives under one umbrella is a means to facilitate

access to this knowledge base for all our customers and users. Transferring knowledge and creating a dialogue with technicians worldwide, finding their needs and sharing experiences is a valuable base for creating solutions that work and help you grow your business.

What does the Prolyte Campus offer?

Sharing knowledge is the pivoting point, in whatever way is needed to get the message across. As a start the Prolyte Campus will offer a mix of online, printed and seminar based means of knowledge transfer. Existing activities, like the BlackBook, How to video's, Rigging Courses and Seminar possibilities, will be continued. New initiatives, like web based learning content and networking opportunities will be developed. Prolyte users will be encouraged to share their experience and daily practice skills.

www.prolyte.com/prolytecampus



Photo: Prolyte Campus at Rolight, The Netherlands

BlackBook

The ultimate reference guide for our industries riggers, trussing and staging technicians, the BlackBook offers renowned technical background information and practical tips and tricks. Completely up-to-date with the latest developments in regulations and product design, this book is a must read for all technicians in the live industry.

www.prolyte.com/brochures

Safety is our driving force

Prolyte Group products comply with strict international standards and regulations. The manufacturing and welding of our products is a very precise and reliable process, we work exhaustively to ensure our procedures and protocols conform to applicable standards and endeavour to be one step ahead of new and future regulations and standards. All products are manufactured to EN1090-3 EXC3, the highest execution class, as certified by two independent notified bodies. All our loading tables and structural calculations are in compliance with EC9.

Helping you build great things